ABSTRACT OF THE DISCLOSURE

In a sputtering method for forming a film on a substrate in a film forming space while monitoring emission intensity of plasma, the method comprises the steps of detecting a thickness of the film formed on the substrate; comparing a detected value with a preset value of the film thickness; and deciding a target value of the emission intensity in accordance with a compared result. With the method, a transparent conductive film is formed which has high uniformity in film thickness, sheet resistance and transmittance and hence has superior characteristics.